# STATE OF VERMONT PUBLIC SERVICE BOARD

Docket No. 7200

Petition of Berkshire Cow Power, LLC, for a certificate of public good, pursuant to 30 V.S.A. Section 248(j), authorizing the construction of a farm-based methane-fueled electrical generating facility in Berkshire, Vermont

Order entered: 10/25/2006

#### I. Introduction

This case involves a petition filed by Berkshire Cow Power, LLC ("Berkshire") on March 30, 2006, requesting a certificate of public good under 30 V.S.A. § 248(j) to construct a methane-fueled electric generating facility at the Pleasant Valley Farm in Berkshire, Vermont. The generating facility would be interconnected with Vermont Electric Cooperative, Inc.'s ("VEC") distribution system. Berkshire submitted prefiled testimony, proposed findings, and a proposed order pursuant to the requirements of 30 V.S.A. § 248(j).

On April 6, 2006, the Public Service Board ("Board") issued a letter to Berkshire stating that the petition was deficient and could not be processed under the procedures contained in Section 248(j). The April 6 letter indicated that, in order for the petition to be complete, Berkshire must file additional information, including an assessment of the aesthetic or other environmental impacts of the power lines necessary for interconnection. The April 6 letter further stated that Berkshire could either submit additional information prior to the commencement of the Section 248(j) process or request that the petition be considered under the full requirements of Section 248(j); in which case, the Board could begin the proceedings with the understanding that the information noted above would be forthcoming.

Berkshire filed the additional required information on July 10, 2006.

On June 29, 2006, VEC filed a petition for a declaratory ruling that an upgrade to a distribution line required to interconnect the proposed Berkshire project is not subject to 30 V.S.A. § 248. The Board reviewed that petition in Docket 7201. In that Docket, the Board issued an Order on September 15, 2006, finding that the Board does not have direct jurisdiction over the distribution upgrade. However, the Board found that, for the Berkshire petition in Docket 7200 to be complete, testimony from VEC was required that described the upgrade and addressed any criteria under Section 248(b) on which the upgrade has the potential for significant impact. VEC previously filed this additional information on September 7, 2006.

Notice of the filing was sent on September 15, 2006, to all entities specified in 30 V.S.A. §248(a)(4)(c) and all other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before October 17, 2006. A similar notice of the filing was published in the *St. Albans Messenger* on September 19 and September 26, 2006.

On October 6, 2006, a stipulation was filed by the Vermont Department of Public Service ("Department"), Berkshire, and VEC, recommending that the Board issue an order approving the proposed project.

No other party filed comments.

The Board has determined that the proposed construction will be of limited size and scope and that the petition has effectively addressed the issues raised with respect to the substantive criteria of 30 V.S.A. § 248. Consequently, we find that the procedures authorized by Section 248(j) are sufficient to satisfy the public interest, and no hearings are required.

#### II. FINDINGS

1. The proposed project would consist of three separate buildings: a concrete-enclosed manure digester (220 feet long by 73 feet wide by 16 feet deep); a wood-framed building (40 feet by 40 feet) which would enclose the motor, generator sets, pumps, plumbing, and other required equipment; and a wood-framed building (50 feet by 100 feet) which would contain the separator equipment and the digested solids storage. St. Pierre pf. at 2.

2. The proposed project would involve moving the unprocessed manure to the digester where the manure would be mixed and heated to a temperature of 100 degrees Fahrenheit. In a process that lasts approximately 21 days, the raw manure degrades and produces methane gas. The methane gas is collected and used as fuel for the turbine. The processed manure would exit from the digester to a mechanical separator which would separate the manure into liquids and solids. St. Pierre pf. at 3.

- 3. The methane produced would fuel two 300 kW generators to produce electricity. St. Pierre pf. at 4.
- 4. An existing distribution line on Richford Road would be upgraded by VEC. The upgrade consists of two parts. First, VEC would add a third phase wire to approximately 5,100 feet of existing two-phase distribution line. No modifications to the existing poles would be required for this portion. Second, VEC would reconductor and convert approximately 6,000 feet of single-phase line to three-phase construction. Although changes to the poles would be required to support the additional wires, there would be no increase in pole height. Abendroth pf. at 2.
- 5. Approximately 300 feet of new three-phase 12.47 kV line would be constructed on the property of Pleasant Valley Farm. One new wood pole would be installed on the property. This pole would support an electronic recloser, a load-break switch, and the conduit risers to connect to the underground system. The recloser would be SCADA-controlled from VEC's dispatch center in Johnson. Approximately 600 feet of three-phase underground line would be installed between the new pole and a pad-mounted transformer. Abendroth pf. at 2-3.
  - 6. VEC would purchase the power produced from the proposed project. Kieny pf. at 1.

### **Orderly Development of the Region**

[30 V.S.A. § 248(b)(1)]

7. The proposed project would not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the

land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 8 and 9, below.

- 8. The Berkshire Selectboard and the Northwest Regional Planning Commission have both endorsed the proposed project. Exhs. 3 and 5.
- 9. The town and regional plan both expressly encourage the development of renewable energy resources. Exhs. 4 and 6.

## **Need for Present and Future Demand for Service**

[30 V.S.A. § 248(b)(2)]

- 10. The proposed project is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures. This finding is supported by findings 11 through 13, below.
- 11. The electricity produced by the proposed project will be needed in that it will be sold at wholesale to VEC to meet the regional need for electricity. St. Pierre pf. at 5.
- 12. The development of renewable energy is recognized by VEC as an integral part of its strategy to meet customer demand for service. St. Pierre pf. at 5.
- 13. The State of Vermont, as a matter of public policy, encourages the development of renewable energy resources. St. Pierre pf. at 5. *See*, 30 V.S.A. § 8001.

## **System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

- 14. The proposed project would not adversely affect system stability and reliability. This finding is supported by findings 14 and 15, below.
- 15. The proposed project would be interconnected at 12.47 kV with a VEC distribution system that originates at VEC's East Berkshire Substation. VEC completed a system impact study which indicated that, with the improvements set forth in the study, the proposed project would not have any undue adverse impacts on system stability or reliability. VEC Interconnection Report at 3.

16. VEC and Berkshire executed a Generation Interconnection Agreement; however, two attachments to the agreement, the Operating Protocols and the Technical Requirements, have not yet been filed. Stipulation at ¶ 7.

## Discussion

The October 6 Stipulation states that Berkshire would not interconnect the generators until the Operating Protocols and Technical Requirements have been reviewed and approved by the Department of Public Service ("Department") and the Board. We accept this requirement.

## **Economic Benefit to the State**

[30 V.S.A. § 248(b)(4)]

- 17. The proposed project would have an economic benefit to the State by providing renewable in-state generation and bolstering the economic viability of the Pleasant Valley Farm. St. Pierre pf. at 6.
- 18. VEC has entered into a seven-year, fixed price contract with Berkshire for the electricity produced from the proposed project. The contract provides VEC a long-term, stable-priced resource. Kieny pf. at 2-4.

# Aesthetics, Historic Sites, Air and Water Purity, the Natural Environment and Public Health and Safety

[30 V.S.A. § 248(b)(5)]

19. The proposed project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and public health and safety. This finding is supported by findings 20 through 41, below, which address the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(a) and (9)(k).

### **Outstanding Resource Waters**

[10 V.S.A. § 1424(a)(d)]

20. The proposed project is not located near any outstanding resource waters. St. Pierre pf. at 8; Abendroth pf. at 7.

### **Water and Air Pollution**

[10 V.S.A. § 6086(a)(1)]

21. The proposed project would not result in undue water or air pollution. This finding is supported by findings 22 through 30, below.

- 22. The proposed project would enable the conversion of raw manure to processed liquid manure. The processed liquid manure is inorganic and can be spread during the growing season, resulting in faster plant uptake and reduced potential for runoff. St. Pierre pf. at 4; Dvorak pf. at 7.
- 23. The proposed project is not located on any water resource identified by the Northwest Regional Planning Commission. Exh. D.
  - 24. The proposed project would reduce the release of methane gas. Dvorak pf. at 7.
- 25. The Air Pollution Control Division of the Agency of Natural Resources issued an "Air Pollution Control Permit to Construct and Operate" to Berkshire on September 19, 2006.

## **Headwaters**

[10 V.S.A. § 6086(a)(1)(A)]

26. The proposed project is not located in a headwaters area. Abendroth pf. at 4; exh. E.

### **Waste Disposal**

[10 V.S.A. § 6086(a)(1)(B)]

27. The proposed project would meet applicable health and environmental conservation department regulations regarding the disposal of wastes, and would not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. St. Pierre pf. at 8; Abendroth pf. at 4.

## **Water Conservation**

[10 V.S.A. § 6086(a)(1)(C)]

28. The proposed project would not utilize water during or after construction. St. Pierre pf. at 8; Abendroth pf. at 4.

## Floodways, Streams, and Shorelines

[10 V.S.A. §§ 6086(a)(1)(D)(E) &(F)]

29. The proposed project is not located in a floodway or near a stream or shoreline. Abendroth pf. at 5; exh. D.

## Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

30. The proposed project would not adversely impact any wetlands. Abendroth pf. at 5; exh. D.

## Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)&(3)]

31. The proposed project would not utilize water, and therefore would not place a burden on existing water supplies. St. Pierre pf. at 8; Abendroth pf. at 5.

## **Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

32. The proposed project would not cause unreasonable soil erosion or reduction in the capacity of the land to hold water if the construction practices recommended in the April 20, 2006, letter from Cross Consulting Engineers, P.C., are followed. The soil disturbance at the site would be limited to the construction of the three proposed buildings and the installation of one pole on Pleasant Valley Farm property. St. Pierre pf. at 2; Abendroth pf. at 5; letter of April 20, 2006, from Cross Consulting Engineers, P.C., to Mark St. Pierre.

### **Transportation Systems**

[10 V.S.A. § 6086(a)(5)]

33. The proposed project would not cause unreasonable congestion or unsafe conditions with respect to transportation systems. St. Pierre pf. at 8; Abendroth pf. at 6.

### **Educational Services**

[10 V.S.A. § 6086(a)(6)]

34. The proposed project would not cause a burden on educational services. St. Pierre pf. at 8; Abendroth pf. at 6.

# **Municipal Services**

[10 V.S.A. § 6086(a)(7)]

35. The proposed project would not cause a burden on municipal services. St. Pierre pf. at 8; Abendroth pf. at 6.

### Aesthetics, Historic Sites

## and Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

- 36. The proposed project would not have an undue adverse impact on the scenic or natural beauty of the area, aesthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 37 through 39, below.
- 37. The proposed project would be located within the current cluster of farm buildings. St. Pierre pf. at 2, 8.
- 38. The proposed distribution line upgrade is a routine procedure that is a common occurrence throughout the state. Abendroth pf. at 6.
- 39. There are no historic sites or rare and irreplaceable natural areas in the vicinity of the proposed project. St. Pierre pf. at 8.

## **Necessary Wildlife Habitat and Endangered Species**

[10 V.S.A. § 6086(a)(8)(A)]

40. The proposed project would not have any impact on wildlife habitat or on any threatened or endangered species. St. Pierre pf. at 8.

## **Development Affecting Public Investments**

[10 V.S.A. § 6086(a)(9)(K)]

41. The proposed project would not unnecessarily or unreasonably endanger the public or quasi-public investment or government or public facilities. Abendroth pf. at 7; exhs. 3, 5.

# **Least-Cost Integrated Resource Plan**

[30 V.S.A. § 248(b)(6)]

42. Berkshire does not distribute or transmit electricity for use by the public. Therefore, it is not obligated to prepare and submit for approval an integrated resource plan. *See*, Docket 7082, Order of 4/26/06 at 54.

## **Compliance with Electric Energy Plan**

[30 V.S.A. § 248(b)(7)]

43. The Department filed a determination, in a letter filed on October 6, 2006, that the proposed project is consistent with the Vermont Twenty-Year Electric Plan, in accordance with 30 V.S.A. § 202(f). *See*, Department letter filed October 6, 2006.

### **Outstanding Resource Waters**

[30 V.S.A. § 248(b)(8)]

44. The proposed project is not located near any outstanding resource waters. St. Pierre pf. at 8; Abendroth pf. at 7.

## **Existing or Planned Transmission Facilities**

[30 V.S.A. § 248(b)(10)]

45. The proposed project can be served economically by existing or planned transmission facilities without undue adverse impact on Vermont utilities or customers. St. Pierre pf. at 8.

### III. Conclusion

Based upon all of the above evidence, we conclude that the proposed construction will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

### IV. ORDER

It Is Hereby Ordered, Adjudged and Decreed by the Public Service Board of the State of Vermont that the proposed modifications, in accordance with the evidence and plans presented in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good shall be issued in the matter.

	Dated at Montpelier,	Vermont this <u>25<sup>th</sup></u>	_ day of _	October	, 2006.
		s/James Volz		) ) Pr	UBLIC SERVICE
		s/David C. Coen			Board
		s/John D. Burke		) )	OF VERMONT
Office of	THE CLERK				
Filed: Oct	tober 25, 2006				
Attest:	s/Judith C. Whitney Deputy Clerk of	the Board			

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.